CLAIMS

We claim:

1. Â computer implemented method for sending and receiving multimedia transmissions between two or more clients, the method comprising the steps of:

determining a maximum inbound and outbound transmission rate for a connection between a client and a server;

determining a latency value for transmissions over the connection;

determining a backlog value for transmissions over the connection; and

varying the inbound and outbound rates of transmission over the connection responsive to the backlog value and the latency value.

2. The computer implemented method of claim 1, wherein the multimedia transmissions are comprised of data packets and varying the rates of transmission is further comprised of:

varying the size of the data packets; and

varying the time interval between the transmission of each data packet.

3. The computer implemented method of claim 1, wherein varying the rate of transmission further comprises:

increasing the rate of transmission if there is no backlog and the rate of transmission is below the maximum transmission rate; and

decreasing the rate of transmission if the backlog is above a predetermined threshold.

4. The computer implemented method of claim 1, wherein the transmission originates at the client and terminates at the server.

5. The computer implemented method of claim 1, wherein the transmission originates at the server and terminates at the client.

6. A system for sending and receiving multimedia data transmissions between two or more clients, the system comprising:

a receiver for receiving the multimedia transmissions;

a transmitter for transmitting the multimedia transmissions at a variable transmission rate;

a bandwidth optimizer coupled to the transmitter, the bandwidth optimizer determining a maximum inbound and outbound transmission rate, monitoring for a backlog in the multimedia data transmissions, and varying the transmission rate responsive to the backlog.

7. The system of claim 6, wherein the multimedia transmissions are comprised of data packets and varying the rate of transmission is further comprised of:

varying the size of the data packets; and

varying the time interval between the transmission of each data packet.

8. The system of claim 6, wherein varying the rate of transmission further comprises:

increasing the rate of transmission if there is no backlog and the rate of transmission is below the maximum transmission rate; and

decreasing the rate of transmission if the backlog is above a predetermined threshold.

9. The system of claim 6, wherein the transmission originates at a client and terminates at a server.

10. The system of claim 6, wherein the transmission originates at a server and terminates at a client.

11. A computer program product stored on a computer readable medium for sending and receiving multimedia transmissions between two or more clients, the computer program product controlling a processor coupled to the medium to perform the operations of:

determining a maximum inbound and outbound transmission rate for a connection between a client and a server;

determining a latency value for transmissions over the connection;

determining a backlog value for transmissions over the connection; and

varying the inbound and outbound rates of transmission over the connection responsive to the backlog value and the latency value.

12. The computer program product of claim 11, wherein the multimedia transmissions are comprised of data packets and varying the rates of transmission is further comprised of:

varying the size of the data packets; and

varying the time interval between the transmission of each data packet.

13. The computer program product of claim 11, wherein varying the rate of transmission further comprises:

increasing the rate of transmission if there is no backlog and the rate of transmission is below the maximum transmission rate; and

decreasing the rate of transmission if the backlog is above a predetermined threshold.

14. The method of claim 11, wherein the transmission originates at the client and terminates at the server.

15. The method of claim 11, wherein the transmission originates at the server and terminates at the client.

Attorney Docket No.: 62601-013